Index of Feature Material

MATERIALS & METHODS

Volume 24

July — December 1946, Inclusive

Feature editorial matter from Volume 24 of MATERIALS & METHODS covering issues from July through December 1946 is indexed here. Material covered in the index includes feature articles, MATERIALS & METHODS Manuals and Engineering File Facts.

For the sake of brevity, we have omitted from the index such departmental material as Shop Notes, Book Reviews, New Materials and Equipment, Blueprints and Letters to the Editor.

Air Gaging, Precision, of Metal Parts,—Nov., p. 1174

ALUMINUM AND ITS ALLOYS:
Aluminum Bearings for Heavy-Duty Applications —Clauser—Sept., p. 633
Aluminum Dipcoated Steel—July, p. 90
Lightweight Motors Built of Aluminum Die Castings—Rose—July, p. 83
Manufacturing Aluminum Alloy Die Castings—Nov., p. 1178
Applying Fiberglas-Reinforced Plastics—Nov., p. 1182.
Atmospheres, Lithium, for Heat Treating—Burpo—Sept., p. 622
Bearings, Aluminum, for Heavy-Duty Applications —Clauser—Sept., p. 633

BRAZING (See Welding):
Carbides, Cemented, Tool Materials (File Facts)—Burpo—Aug., p. 419
Carbide Tooling, Selecting a Machine Tool for—Du Mond—Aug., p. 374

CASTING AND CASTINGS:
Cast Nickel Alloys (File Facts)—Nov., p. 1223
Lightweight Motors Built of Aluminum Die Castings—Rose—July, p. 83
Patterns Made from Cast Plastics—Simmons—Dec., p. 1466
Permanent Mold Gray Iron Castings—Hoenicke —Oct., p. 901
Precision Cast Finned Cylinders—Valyi—Dec., p. 1450
Steels for Die Casting Die Blocks—Erickson—Aug., p. 389
Use of Light Metal Die Castings—Nov., p. 1160
Centerless Grinding of Threads—Nov., p. 1180
Chromium Plate, Hard, and Its Uses—Hosdowich—Oct., p. 896

COATINGS AND FINISHING:
Aluminum Dipcoated Steel—July, p. 90
Chromium Plate, Hard, and Its Uses—Hosdowich —Oct., p. 896
Drying Industrial Finishes on Metals—Clauser—Oct., p. 910
Drying Industrial Finishes on Metals, Part II—Clauser—Dec., p. 1452
Electroforming, Precision Metal Parts Produced by,—Clauser—July, p. 112
Electroplated Coatings, Identification of, (File Facts)—Black and Sinner—Sept., p. 673
Resin Finishing of Refrigerator Parts—Stedman—Aug., p. 385
Cold Forming of Brass—Nov., p. 1184
Cold Treatment of Steel, A Practical Approach to, —Brown—Dec., p. 1445
Conversion Factors, European to U. S. Engineering Units (File Facts)—Burpo—Aug., p. 421

COPPER, BRASS AND BRONZE:
Cold Forming of Brass—Nov., p. 1184
Copper-Base Powder Metallurgy Parts—Chase—Dec., p. 1439
Extruded Shapes Speed Brass Forging Output—Chase—July, p. 103
Degreasing, Vapor,—Black—July, p. 95
Dies for Cold Headers—Palmer—Sept., p. 646
Drawing Stainless Steel—Nov., p. 1168
Drying Industrial Finishes on Metals, Part I—Clauser—Oct., p. 910
Drying Industrial Finishes on Metals, Part II—Clauser—Dec., p. 1452
Economics of Engineering Materials, Basic Considerations—Knight—Sept., p. 613
Electroforming, Precision Metal Parts Produced by, —Clauser—July, p. 112

ENGINEERING FILE FACTS:
Cast Nickel Alloys—Nov., p. 1223
Cemented Carbide Tool Materials, Comparison of Various Grades—Burpo—Aug., p. 419
Conversion Factors, European to U. S. Engineering Units—Burpo—Aug., p. 421
Electroplated Coatings, Identification of,—Black and Sinner—Sept., p. 673
Grinding Machines, Standard Plain—Burpo—Oct., p. 945
Heat and Cost Properties of Fuels—Sept., p. 675
Mechanical Testing of Metals—Dec., p. 1499
Relative Corrodability of Metals and Alloys—Dec., p. 1501
Relief of Stresses in Steel Products—Nov., p. 1225
Shear Properties of Metals and Alloys, Part III —Burpo—July, p. 143
Standard Steels—Oct., p. 947
Engineering Materials, Economics of,—Knight—Sept., p. 613
Extruded Shapes Speed Brass Forging Output—Chase—July, p. 103
Fabricating Sheet Metal Parts for Jet Engines—Knight—Dec., p. 1461
Fabrication and Use of Magnesium Alloys—Nov., p. 1186

FINISHING (See Coatings and Finishing):
Finishing Cylinder Bores at Buick—Rose—Sept., p. 619

FORGING:
Drop Forgings for Gas Turbine Applications—Schweizer—Sept., p. 642
Extruded Shapes Speed Output of Brass Forgings —Chase—July, p. 103
Fuels, Heat and Cost Properties (File Facts)—Sept., p. 675
Gears, Steel, Induction Heating Applied to,—Gray —Oct., p. 915
Grinding, Centerless, of Threads—Nov., p. 1180
Grinding Machines, Characteristics of Standard Plain (File Facts)—Burpo—Oct., p. 945
Grinding, Precision (MATERIALS & METHODS Manual)—Burpo—Oct., p. 921

HEATING AND HEAT TREATING:
A Practical Approach to Cold Treatment of Steel —Brown—Dec., p. 1445
Heat and Cost Properties of Fuels (File Facts)—Sept., p. 675
Heat Treating and Stabilizing High Carbon Stainless Steels—Boyer and Miller—Sept., p. 637
Induction Heating and Spinning—Nov., p. 1190
Induction Heating Applied to Steel Gears—Gray —Oct., p. 915
Induction Heating (MATERIALS & METHODS Manual)—Cady—Aug., p. 399
Lithium Atmospheres for Heat Treating—Burpo —Sept., p. 622
Rectification of High Temperature Salt Baths—Burpo—July, p. 109

HIGH TEMPERATURES:
Drop Forgings for Gas Turbine Applications—Schweizer—Sept., p. 642
Fabricating Sheet Metal Parts for Jet Engines—Knight—Dec., p. 1461
Heat Resistant Alloys—Nov., p. 1164
High Temperature Alloys—Nov., p. 1162

(Continued on page 1630)

High Temperature Alloy S-816—Wilson—Oct., p. 855
Use of High Temperature Alloys—Nov., p. 1176

INDUCTION (See Heating and Heat Treating):

INSPECTION (See Testing):
Inspection (See Testing):
Lithium Atmospheres for Heat Treating—Burpo—Sept., p. 622

MACHINING:
Cemented Carbide Tool Materials (File Facts)—Burpo—Aug., p. 419
Centerless Grinding of Threads—Nov., p. 1180
Characteristics of Standard Plain Grinding Machines (File Facts)—Burpo—Oct., p. 945
Machining and Finishing Cylinder Bores at Buick—Rose—Sept., p. 619
Machining of Metals—Nov., p. 1170
Precision Grinding (MATERIALS & METHODS Manual)—Burpo—Oct., p. 921
Selecting Machine Tools for Carbide Tooling—Du Mond—Sept., p. 374

MAGNESIUM:
Fabrication and Use of Magnesium Alloys—Nov., p. 1186
Magnesium in Electrical Batteries—Knight—Dec., p. 1469
Portable X-Ray Unit Utilizes Magnesium—Kes—Sept., p. 626
Use of Light Alloy Die Castings—Nov., p. 1160
MATERIALS & METHODS Achievement Award Winners—Nov., p. 1153

MATERIALS & METHODS MANUALS:
Induction Heating—Cady—Aug., p. 399
Nickel and High-Nickel Alloys—Woldman—Dec., p. 1475
Plastic Laminates—Rose—Sept., p. 653
Precision Grinding—Burpo—Oct., p. 921
Tool Steels—Burpo—July, p. 119
Molding, Stone-Like Plastic Formed by, Du Mond—July, p. 87
National Metal Congress and Exposition Preview—Dec., p. 1193
Nickel and High-Nickel Alloys — MATERIALS & METHODS Manual)—Woldman—Dec., p. 1475

NOMMETALLIC MATERIALS:
Applying Fiberglas-Reinforced Plastics—Nov., p. 1182
Patterns Made From Cast Plastics—Simmons—Dec., p. 1466
Plastic Laminates (MATERIALS & METHODS Manual)—Rose—Sept., p. 653
Plywood as an Engineering Material—Cady—Aug., p. 359
Polythene Plastics for Packaging—Nov., p. 1188
Resin Finishing of Refrigerator Parts—Stedman—Aug., p. 385
Rubber-Metal Composites—Merrill—Oct., p. 891
Sapphire Tools, Gages and Parts—Nov., p. 1166
Stone-Like Plastic Formed by Molding—Du Mond—July, p. 87

PARTS AND METAL FORMS:
Copper-Base Powder Metallurgy Parts—Chase—Dec., 1439
Drop Forgings for Gas Turbine Applications—Schweizer—Sept., p. 642
Extruded Shapes Speed Brass Forging Output—Chase—July, p. 103
Permanent Mold Gray Iron Castings—Hoenicke—Oct., p. 901
Precision Cast Finned Cylinders—Valyi—Dec., p. 1450
Precision Parts Produced by Electroforming—Clauser—July, p. 112
Use of Light Metal Die Castings—Nov., p. 1160
Wire and Ribbon Forms—Chase—Sept., p. 628

PLASTICS (See Nonmetallic Materials):
Polythene Plastics for Packaging—Nov., p. 1188

POWDER METALLURGY:
Copper-Base Powder Metallurgy Parts—Chase—Dec., p. 1439
Powder Metallurgy vs. Other High Production Methods—Chase—Aug., p. 363
Use of Ultra-Fine Particles in Powder Metallurgy—Hausner—July, p. 98
Patterns Made from Cast Plastics—Simmons—Dec., p. 1466
Practical Approach to Cold Treatment of Steel—Brown—Dec., p. 1445
Precision Air Gaging of Metal Parts—Nov., p. 1174
Precision Cast Finned Cylinders — Valyi — Dec., p. 1450
Precision Grinding (MATERIALS & METHODS Manual)—Burpo—Oct., p. 921
Precision Parts Produced by Electroforming—Clauser—July, p. 112
Prestressing of Metals and Metal Parts—Nov., p. 1156
Radar Transformer Steel—Cole and Burns—Dec., p. 1457
Rectification of High Temperature Salt Baths—Burpo—July, p. 109
Relief of Stresses in Metal Products (File Facts)—Nov., p. 1225
Resin Finishing of Refrigerator Parts—Stedman—Aug., p. 385
Rubber-Metal Composites—Merrill—Oct., p. 89
Safe Handling of Solvents—Gordon—Oct., p. 90
Salt Baths, High Temperature, Rectification of,—Burpo—July, p. 109
Sapphire Tools, Gages and Parts—Nov., p. 1166
Shear Properties of Metals and Alloys, Part III (File Facts)—Burpo—July, p. 143
Solvents, Safe Handling of,—Gordon—Oct., p. 90
Stabilization of High Carbon Stainless Steel—Boyer and Miller—Sept., p. 637

STAINLESS STEEL (See Steels):
Supersonic Inspection of Aluminum Alloys—Nov., p. 1172

STEELS:
Aluminum Dipcoated Steel—July, p. 90
A New Radar Transformer Steel—Cole and Burns—Dec., p. 1457
A Practical Approach to Cold Treatment of Steel—Brown—Dec., p. 1445
Characteristics of Low Alloy, High Tensile Steels—Zanetti—Aug., p. 370
Drawing Stainless Steel—Nov., p. 1168
High Strength, High Temperature Alloy S-816—Wilson—Oct., p. 885
Induction Heating Applied to Steel Gears—Gray—Oct., p. 915
Stabilization and Heat Treatment of High Carbon Stainless Steels—Boyer and Miller—Sept., p. 637
Standard Steels (File Facts)—Oct., p. 947
Steels for Die Casting Die Blocks—Erickson—Aug., p. 389
Tool Steels (MATERIALS & METHODS Manual)—Burpo—July, p. 119

TESTING AND INSPECTION:
Finishing Cylinder Bores at Buick—Rose—Sept., p. 619
Identification of Electroplated Coatings (File Facts)— Black and Sinner—Sept., p. 673
Precision Air Gaging of Metal Parts—Nov., p. 1174
Supersonic Inspection of Aluminum Alloys—Nov., p. 1172
Supersonic Inspection of Materials—Clauser—Aug., p. 379
Vapor Degreasing—Black—July, p. 95

WELDING, JOINING AND FASTENING:
Fabricating Sheet Metal Parts for Jet Engines—Knight—Dec., p. 1461
Fabrication and Use of Magnesium Alloys—Nov., p. 1186
Induction Heating and Spinning—Nov., p. 1190
Induction Heating (MATERIALS & METHODS Manual)—Cady—Aug., p. 399
Wire and Ribbon Forms—Chase—Sept., p. 628

Author's Index

Black, George
Identification of Electroplated Coatings (File Facts), Sept., p. 673, (with Jack Sinner)
Vapor Degreasing, July, p. 95
Boyer, H. E. and Miller, H. C., Heat Treatment and Stabilization of High Carbon Stainless Steels, Sept., p. 637
Brown, Orlo E., A Practical Approach to Cold Treatment of Steel, Dec., p. 1445
Burpo, Robert S., Jr.
Cemented Carbide Tool Materials (File Facts), Aug., p. 419
Conversion Factors, European to U. S. Engineering Units, Aug., p. 421
Grinding Machines, Standard Plain (File Facts), Oct., p. 945
Lithium Atmospheres for Heat Treating, Sept., p. 622
Precision Grinding (MATERIALS & METHODS Manual), Oct., p. 921
Rectification of High Temperature Salt Baths, July, p. 109
Shear Properties of Metals and Alloys, Part III, July, p. 143
Tool Steels (MATERIALS & METHODS Manual), July, p. 119
Cady, Edwin Laird
Induction Heating (MATERIALS & METHODS Manual), Aug., p. 399
Plywood as an Engineering Material, Aug., p. 359
Chase, Herbert
Copper-Base Powder-Metallurgy Parts, Dec., p. 1439
Extruded Shapes Speed Brass Forging Output, July, p. 103
Powdered Metal vs. Other High Production Methods, Aug., p. 363
Wire and Ribbon Forms, Sept., p. 628
Clauser. H. R.
Aluminum Bearings for Heavy-Duty Applications, Sept., p. 633
Drying Industrial Finishes on Metals, Part I, Oct., p. 910
Drying Industrial Finishes on Metals, Part II, Dec., p. 1452
Precision Metal Parts Produced by Electroforming, July, p. 112
Supersonic Inspection of Materials, Aug., p. 379
Cole, G. H., and Burns, R. S., A New Radar Transformer Steel, Dec., p. 1457
Du Mond, T. C.
Selecting a Machine Tool for Carbide Tooling, Aug., p. 374
Stone-Like Plastic Formed by Molding, July, p. 87
Erickson, James L., Steels for Die Casting Die Blocks, Aug., p. 389
Gordon, Lillian, Safe Handling of Solvents, Oct., p. 905
Gray, T. H., Induction Heating Applied to Steel Gears, Oct., p. 915
Hausner, Henry H., Use of Ultra-Fine Particles in Powder Metallurgy, July, p. 98
Hoenicke, Edward C., Permanent Mold Gray Iron Castings, Oct., p. 901
Hosdowich, J. M., Hard Chromium Plate and Its Uses, Oct., p. 896
Kes, William, Portable X-Ray Unit Utilizes Magnesium, Sept., p. 626
Knight, Harold A.
Economics of Engineering Materials, Sept., p. 613
Fabricating Sheet Metal Parts for Jet Engines, Dec., p. 1461
Magnesium Electrical Batteries, Dec., p. 1469
Merrill, James A., Rubber-Metal Composites, Oct., p. 891
Miller, H. C. (see Boyer, H. E.)
Palmer, H. Hancock, Dies for Cold Headers, Sept., p. 646
Rose, Kenneth
Lightweigh Motors Built of Large Aluminum Die Castings, July, p. 83
Machining and Finishing Cylinder Bores at Buick, Sept., p. 619
Plastic Laminates (MATERIALS & METHODS Manual), Sept., p. 653
Schweizer, Carl I., Drop Forgings for Gas Turbine Applications, Sept., p. 642
Simmons, C. R., Patterns Made from Cast Plastics, Dec., p. 1466
Sinner, Jack, (See Black, George)
Valyi, E. I., Precision Cast Finned Cylinders, Dec., p. 1450
Wilson, Thomas Y., High Strength, High Temperature Alloy S-816, Oct., p. 885
Woldman, Norman E., Nickel and High-Nickel Alloys, Dec., p. 1475
Zanetti, J. K., Characteristics of Low Alloy, High Tensile Steel, Aug., p. 370